

FIG. 1

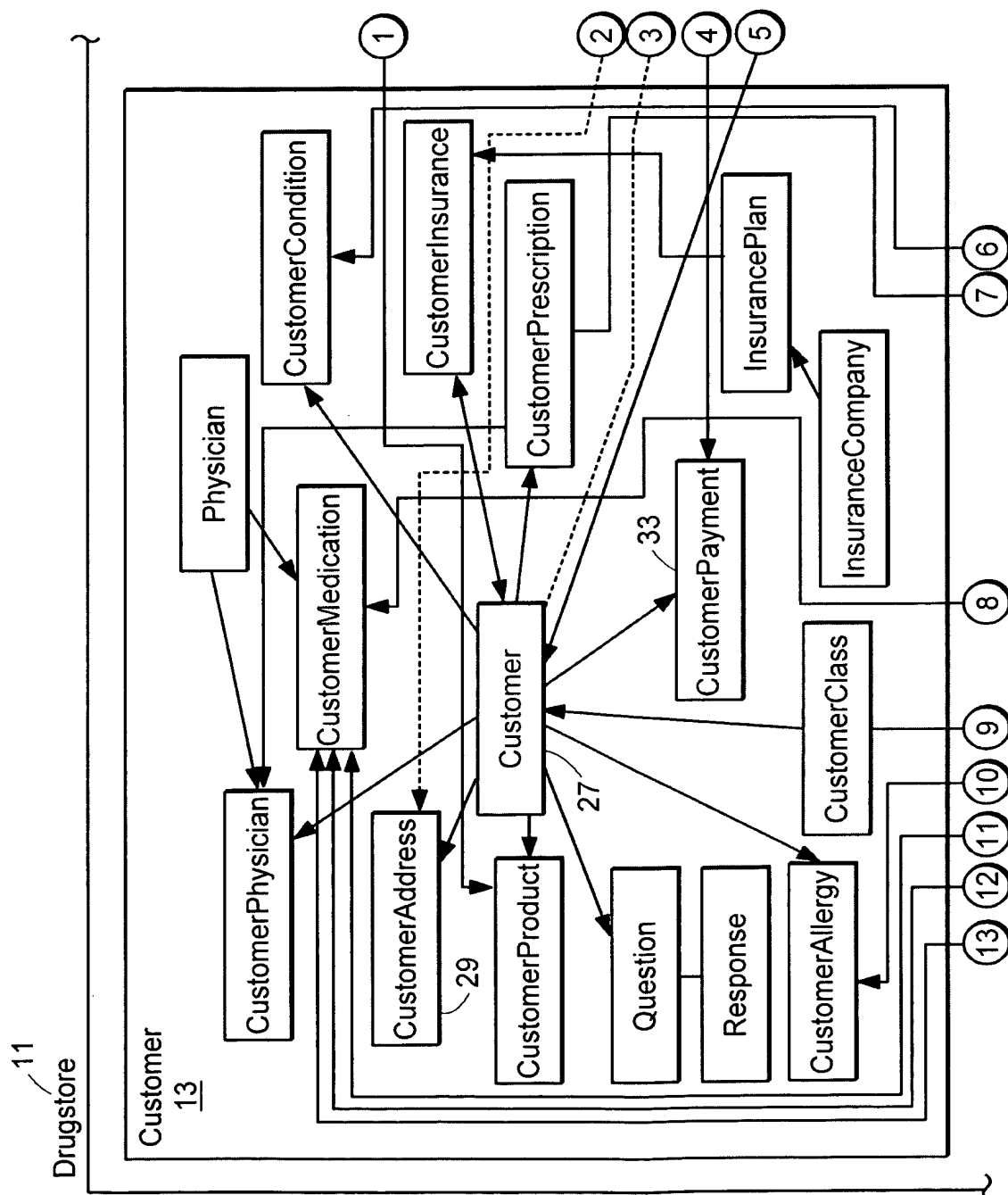


FIG. 1A

2/20

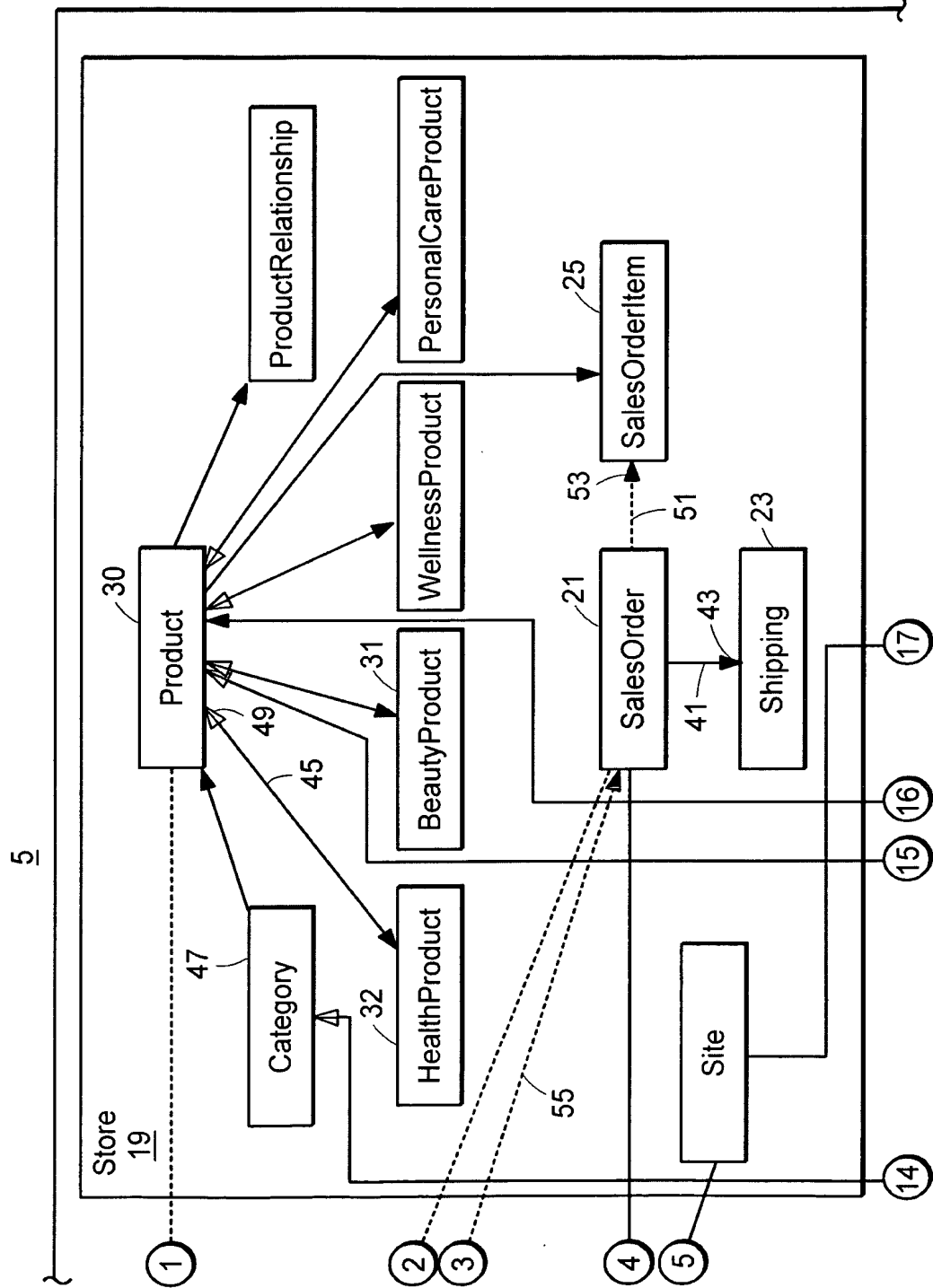
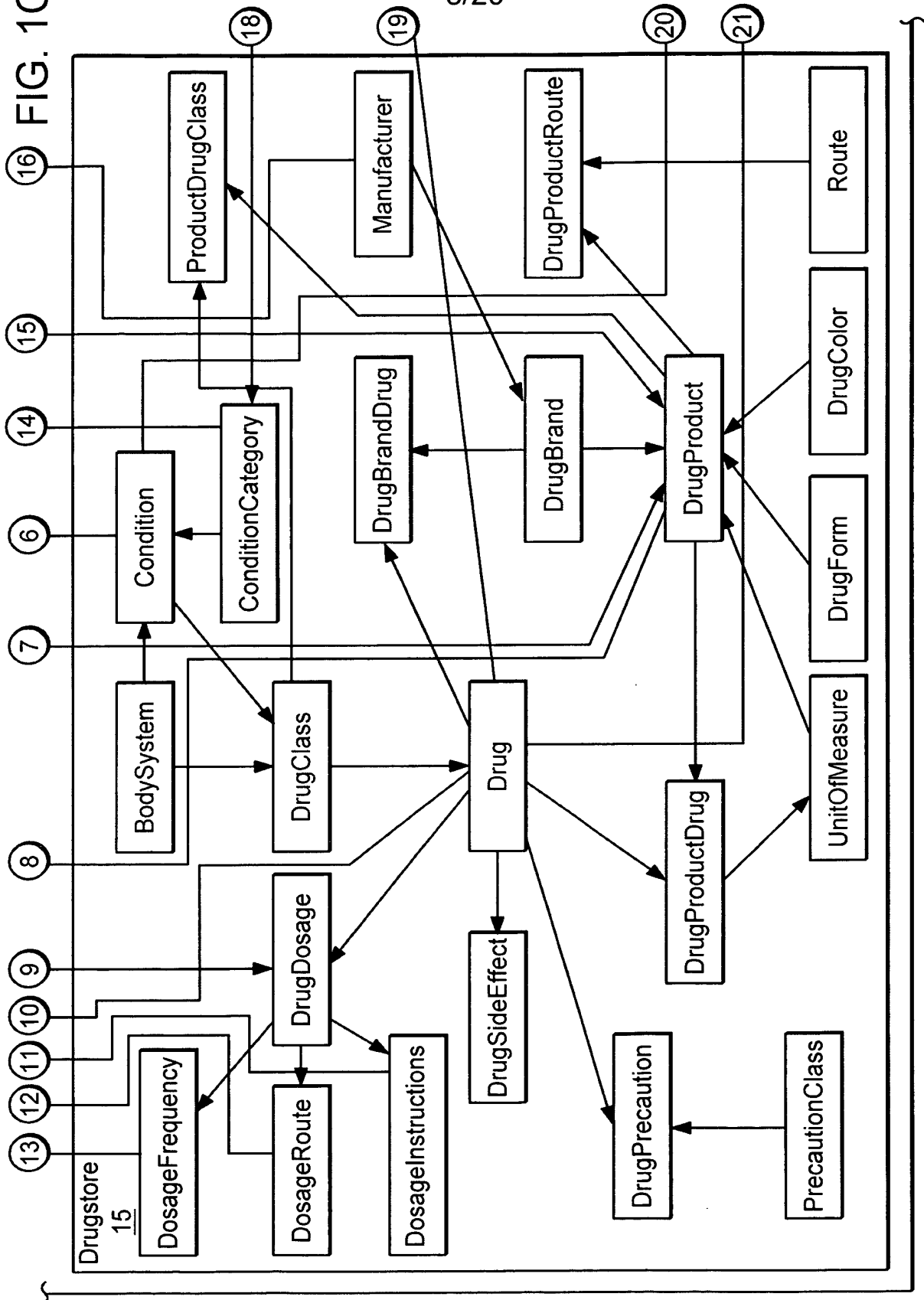


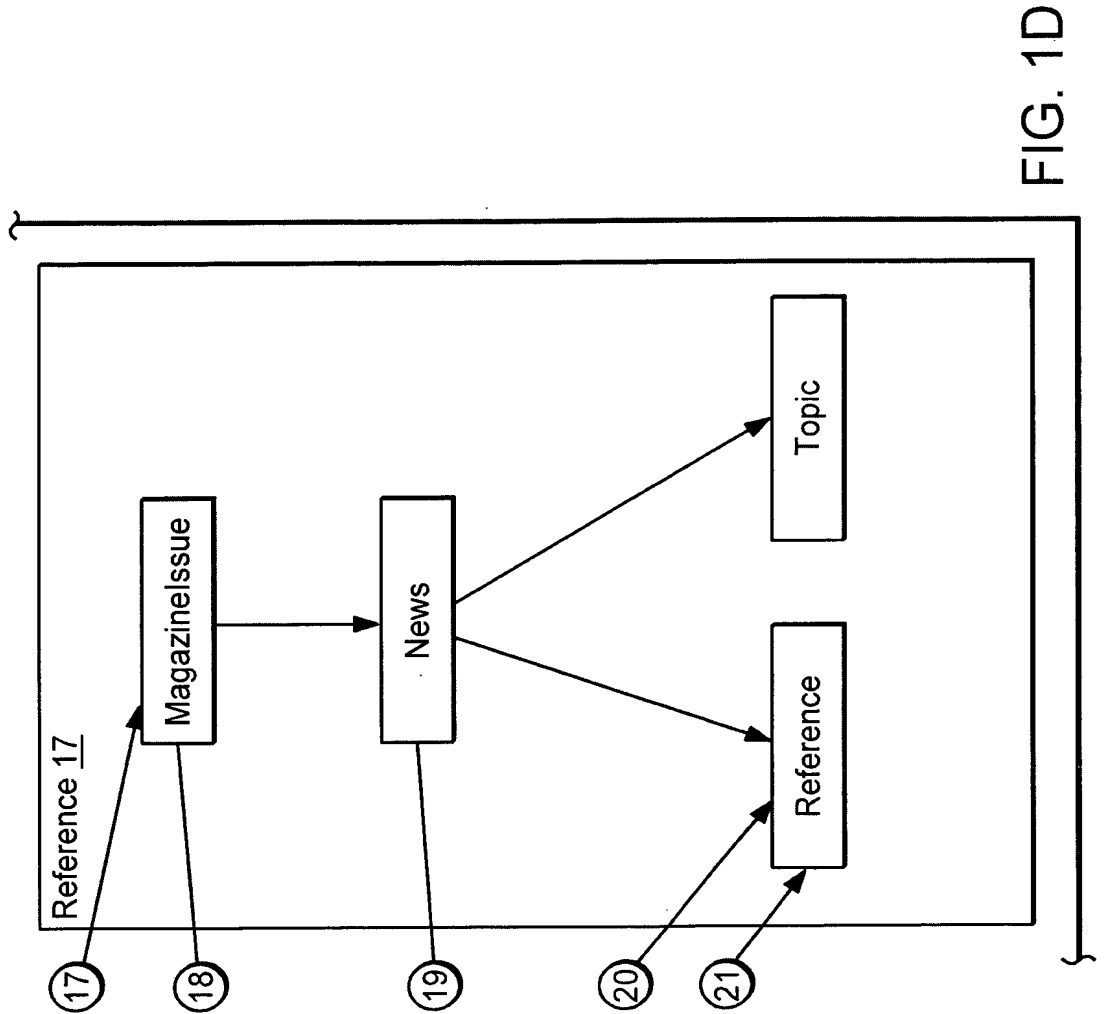
FIG. 1B

3/20

FIG. 1C



4/20



5/20

FIG. 2

211

215

217

219

213

221

210

241

225

253

251

255

231

227

229

243

233

235

237

239

241

243

245

247

249

251

253

255

257

259

261

263

265

267

269

271

273

275

277

279

281

283

285

287

289

291

293

295

297

299

301

303

305

307

309

311

313

315

317

319

321

323

325

327

329

331

333

335

337

339

341

343

345

347

349

351

353

355

357

359

361

363

365

367

369

371

373

375

377

379

381

383

385

387

389

391

393

395

397

399

401

403

405

407

409

411

413

415

417

419

421

423

425

427

429

431

433

435

437

439

441

443

445

447

449

451

453

455

457

459

461

463

465

467

469

471

473

475

477

479

481

483

485

487

489

491

493

495

497

499

501

503

505

507

509

511

513

515

517

519

521

523

525

527

529

531

533

535

537

539

541

543

545

547

549

551

553

555

557

559

561

563

565

567

569

571

573

575

577

579

581

583

585

587

589

591

593

595

597

599

601

603

605

607

609

611

613

615

617

619

621

623

625

627

629

631

633

635

637

639

641

643

645

647

649

651

653

655

657

659

661

663

665

667

669

671

673

675

677

679

681

683

685

687

689

691

693

695

697

699

701

703

705

707

709

711

713

715

717

719

721

723

725

727

729

731

733

735

737

739

741

743

745

747

749

751

753

755

757

759

761

763

765

767

769

771

773

775

777

779

781

783

785

787

789

791

793

795

797

799

801

803

805

807

809

811

813

815

817

819

821

823

825

827

829

831

833

835

837

839

841

843

845

847

849

851

853

855

857

859

861

863

865

867

869

871

873

875

877

879

881

883

885

887

889

891

893

895

897

899

901

903

905

907

909

911

913

915

917

919

921

923

925

927

929

931

933

935

937

939

941

943

945

947

949

951

953

955

957

959

961

963

965

967

969

971

973

975

977

979

981

983

985

987

989

991

993

995

997

999

Ready

File Edit View Insert Project Multi User Construct Import Window Help

Entity Services Attributes Agents Process Agents Documents Messages Data Gen Data Entry Experience Gen Object Gen Test Cockpit

☐ To be Deleted ☐ Class Attribute 251

Attribute List

☒ User ☐ System ☐ Rollups

SalesOrder ☐ Sort 255

Attribute Name	Attribute Type	Attribute Value
1 Customer	1	1
2 OrderItems	2	2
3 OrderDate	3	3
4 SubTotal	4	4
5 ShippingCharge	5	5
6 Taxes	6	6
7 OrderTotal	7	7
8 PrescriptionOrder	8	8
9 ShippingAddress	9	9
10 ShippingMode	10	10
11 NameOnShipLabel	11	11
12 OrderStatus	12	12
13 OrderNumber	13	13
14 OrderStatusString	14	14
15 Payment	15	15
16 BillingAddress	16	16
17 Shipping	17	17
18 StateVar	18	18

241 225 253

New Delete Up Down

— SalesOrder

Define Enum

StateVar

1 Initiate

2 Registered

3 Verified

261

Local

Options

Not in Archive

Not in Audit Trail

Not in Template

Properties

Required

Read Only

Process State

Owns

Public

Non-Persistent

Multi-Value

Nested

Keys

Identity

Unique Key

Indexed

Cluster

User Selecting

User Identifying

Primary Key

Presentation

Group

Entry Control Type

Edit

View Control Type

Edit

Sub Object

Button

In place

Button Icon

User Invisible

Control Style

Control Style

NUM

6/20

FIG. 3

NewArchitect Workbench - [NewDrugStore3.]

File Edit View Insert Project Multi User Construct Import Window Help

P S E A As Uc Do M Re ? V

Entity Services Attributes Agents Process Agents Documents Messages Data Gen Data Entry Experience Gen Object Gen Test Cockpit

☐ To be Deleted ☐ Class Attribute

Attribute List

☒ User ☐ System ☐ Rollups

SalesOrder Sort

1	R	Customer
2	M	OrderItems
3	B	OrderDate
4	B	SubTotal
5	B	ShippingCharge
6	B	Taxes
7	B	OrderTotal
8	B	PrescriptionOrder
9	S	ShippingAddress
10	E	ShippingMode
11	B	NameOnShipLabel
12	B	OrderStatus
13	B	OrderNumber
14	B	OrderStatusString
15	S	Payment
16	S	BillingAddress
17	S	Shipping
18	E	StateVar

New Delete Up Down

→SalesOrder

BeautyProduct
Category
HealthProduct
PersonalCareP
Product
ProductRelatio
SalesOrder
SalesOrderItem
Shipping
Site
WellnessProdu
Customer
notused
ExtCategory
New
NewApplication

Data Type ☐ Basic ☐ Enum ☒ Class 333

CustomerPayment Go Current

☒ Parent Entity Relationship
☒ Directional Event Channel

Properties Keys Options

Required ☐ Read Only ☐ Identity ☐ Not in Archive ☐
Process State ☐ Owns ☒ Unique Key ☐ User Selecting ☐
Non-Persistent ☐ Public ☐ Indexed ☐ User Identifying ☐ Not in Audit Trail ☐
Multi-Value ☐ Nested ☐ Cluster ☐ Primary Key ☐ Not in Template ☐

Presentation Group Edit Control Style Control Style Button In place User Invisible

Entity Control Type Edit Control Style Control Style Button In place User Invisible

View Control Type Edit Control Style Control Style Button In place User Invisible

Sub Object Edit Control Style Control Style Button In place User Invisible

Ready

Start NeuArchitect DBTool-Micro TnoDocument Visual Sources Exploring App DBTool-Micro NeuArchitect DBTool-Micro NUM 2:02 PM

7/20

FIG. 4

NeuArchitect Workbench - NewDrugStore3

File Edit View Insert Project Multi User Construct Import Window Help

P S E A As Uc Do M Re ? V ? Sm Qm Pm T

Entity Services Attributes Agents Process Agents Documents Messages Data Gen Data Entry Experience Gen Object Gen Test Cockpit

☐ To be Deleted ☐ Class Attribute

Attribute List

☒ User ☐ System ☐ Rollups

SalesOrder ☐ Sort

IR	Attribute Name
1	R Customer
2	M OrderItems
3	B OrderDate
4	B 1 SubTotal
5	B 1 Shipping Charge
6	B 1 Taxes
7	B 1 OrderTotal
8	B PrescriptionOrder
9	S ShippingAddress
10	E ShippingMode
11	B NameOnShipLabel
12	B OrderStatus
13	B 1 OrderNumber
14	B OrderStatusString
15	S Payment
16	S BillingAddress
17	S Shipping
18	E StateVar

45

BeautyProduct
Category
HealthProduct
PersonalCareP
Product
ProductRelatio
SalesOrder
SalesOrderItem
Shipping
Site
WellnessProdu
Customer
notused
ExtCategory
New
NewApplication

Name Taxes
Caption Taxes
Description
To Do
Help

Business Rules (1)

Attribute Methods
DB Name
Taxes

Data Type ☒ Basic ☐ Enum ☐ Class
Money

Size 15 Precision 2

Format

Rollup Summary ☐ Sum ☐ Mean ☐ Max ☐ Min

Properties

Required ☐ Read Only ☐ Process State ☐ Owns ☐ Non-Persistent ☐ Public ☐ Multi-Value ☐ Nested ☐ Keys

Identity ☐ Unique Key ☐ Indexed ☐ Cluster ☐ Primary Key ☐ Not in Archive ☐ Not in Audit Trail ☐ Not in Template ☐ Options

Presentation

Group ☐ User Invisible ☐ Entry Control Type Edit Control Style Edit View Control Type Edit Sub Object ☐ Button ☐ In place Button Icon

New Delete Up Down

—SalesOrder

Ready

Start Exploring App DBTool-Micro Visual Sources ToolDocument DBTool-Micro NeuArchitect NUM 2:02 PM

8/20

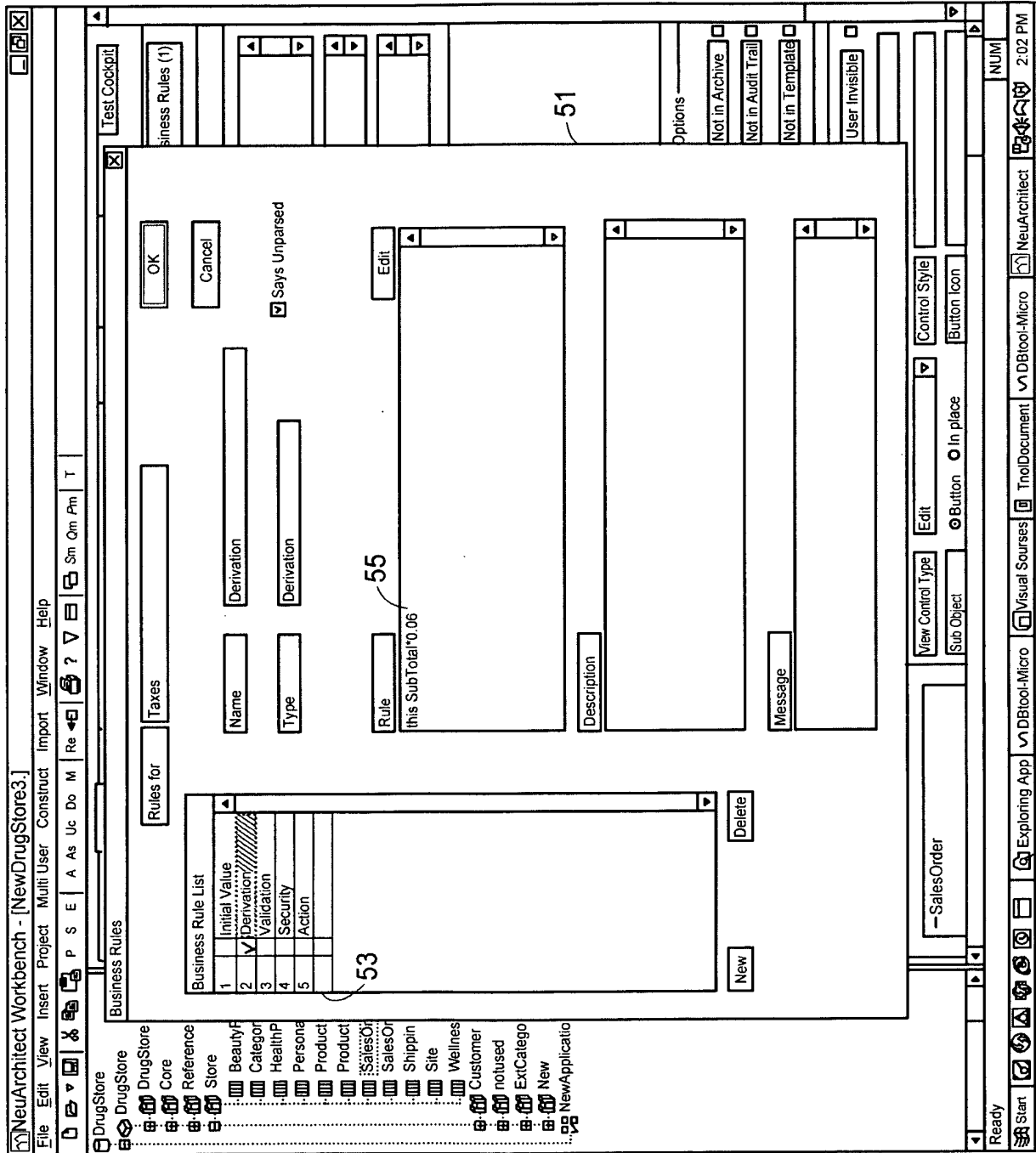


FIG. 5

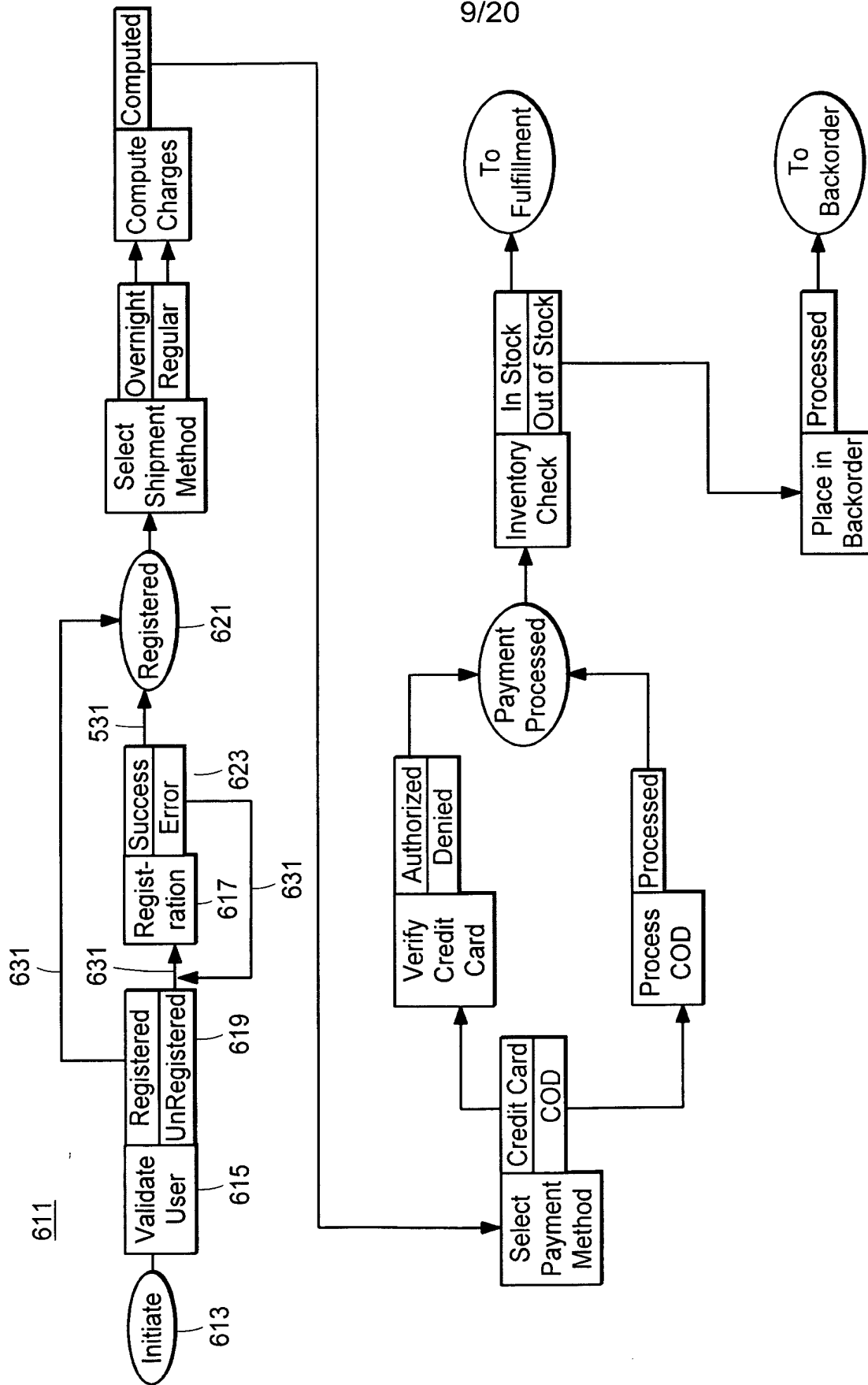


FIG. 6

10/20

FIG. 7

eComBuilder - [NewDrugStore3.OMD]

File Edit View Insert Project Multi User Construct Import Window Help

P S E A As Uc Do M Rel ? V Sm Qm Pm T

Entity Services Attributes Agents Process Agents Documents Messages Data Gen Data Entry Experience Gen Object Gen Test Cockpit

Method List ☐ Snow System Generated

Sales Order	
1	ProcValidateUser
2	ProcRegistrationList
3	DeleteItem
4	ProcessShippingInfo
5	ProcessCreditCardInfo
6	GetShippingCharge
7	GetSubTotal
8	ProcessExecuteOrder
9	ProcUpdateItems
10	ProcCheckout
11	ProcCreditCard

713

715

```

var i = 0;
var Total = 0;
var Found = false;
for(i=0; i< this.OrderItems.length; i++)
{
    var Oltem = this.OrderItems[i];
    if(Oltem.Product_ID == Product_ID)
    {
        Oltem.Quantity += Quantity;
        Oltem.LoadProduct();
        Oltem.DeriveAll();
        Oltem.EOPersist(Status=3;
        Oltem.Update();
        Found = true;
        break;
    }
}

```

Code ☒ JavaScript ☐ Java ☐ C++

Name

AddItemToOrder

Caption

Process State

☒ Public ☐ Abstract ☐ Required in Inherited Class

Description

To Do

☐ Instance ☐ Set ☐ Class

☒ Object ☐ Database

Definition

voidAddItemToOrder(intProduct_ID, intQuantity)

Class	Name	In	Out	Rel	R	Arr
1 Int	Product ID	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Int	Quantity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

New Delete Up Down

Parent Child

Transfer Methods

Ready

11/20

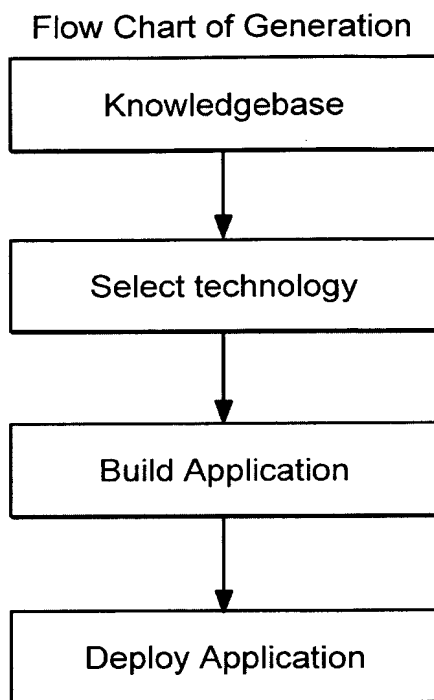


FIG. 8



13/20

1017

1019

1011

1015

1013

Properties

Form Object Space Data Security Parameters Form Themes Meta tags Technology

☐ Final ☒ View only ☐ Secure page ☐ Check for required fields

☐ Report ☐ Center ☒ Has data access

Name: Insertcus

Directory expression:

Entity: Customer

Title:

Theme: Current

Style: BaseControls

Control style: BaseControls

HTML style:

HTML template:

Description:

To do:

Script OnLoad:

Script Client:

View

Data access: Enter Only

Data binding: Auto(Same as Parent)

View name:

Use transactions:

OK

Properties

FIG. 10

14/20

1011

Properties

Form Object Space Data Security Parameters Form Themes Meta tags Technology

☐ Retire ☒ Final ☐ View only ☐ Secure page ☐ Check for required fields

☐ Report ☐ Center ☒ Has data access

Name: insertcus

Directory expression:

Entity: Customer

Title:

Theme: Current

Style: BaseControls

Control style: BaseControls

HTML style:

HTML template:

Description:

To do:

Script OnLoad:

Script Client:

View

Data access: Enter Only

Data binding: Auto(Same as Parent)

View name: Auto(Same as Parent)
Dynamic
Static

Use transactions:

OK

Properties

FIG. 10A

15/20

1019

Properties

Form Object Space Data Security Parameters Form Themes Meta tags Technology

Attribute name in object space: Customer

Entry name in object space: Customer

Selection:

Sort:

Current entity available attributes

Entity list for current document

All entities

1121

1119

1117

1113

1115

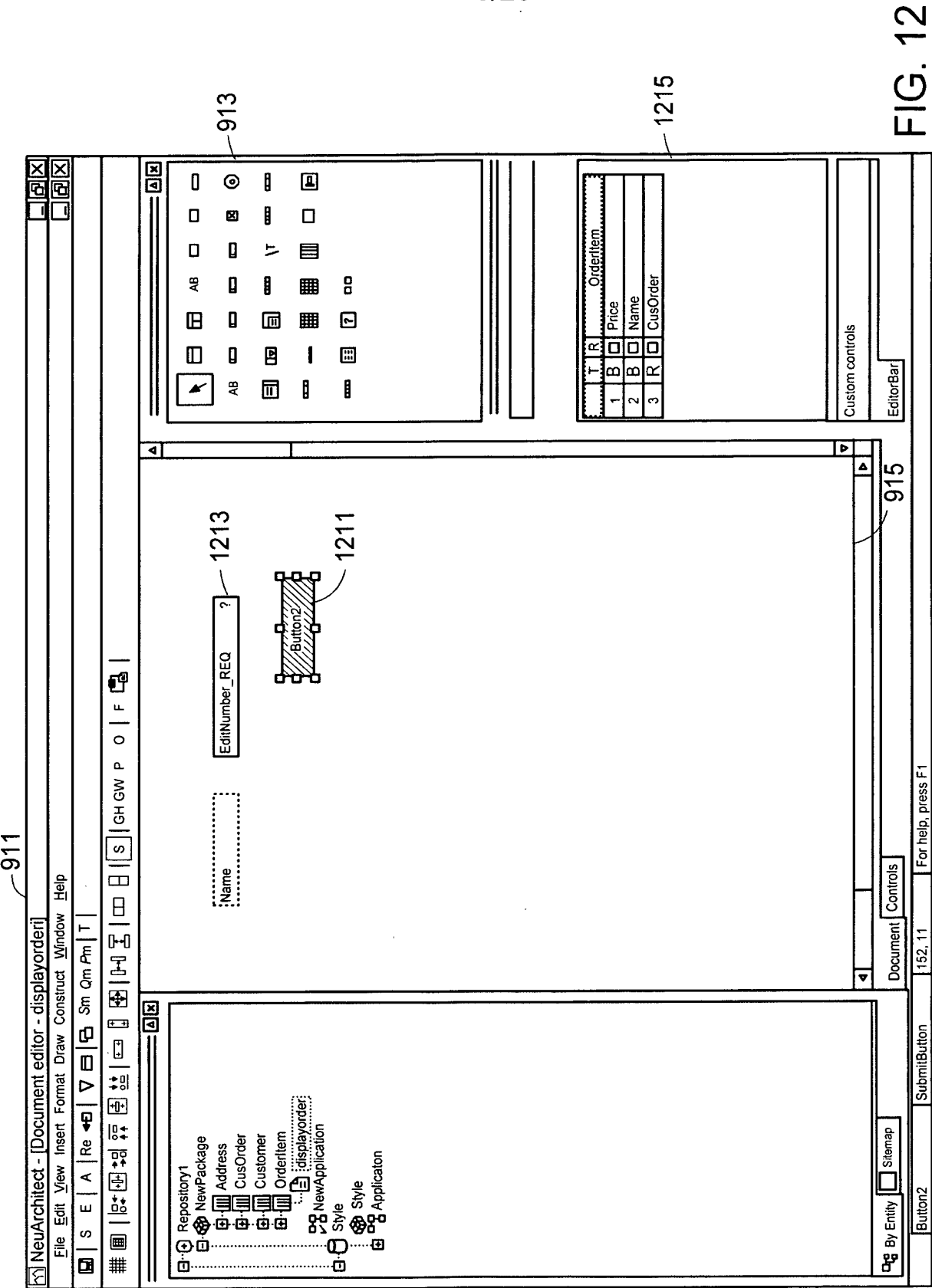
Refresh

Remove

OK

Properties

FIG. 11



17/20

1311

Control properties

Control Display View Expressions Events Buddy Control HTML

Style:

☐ Mouse effect

☐ 3D font

☐ Set 3D

Highlight color:

Shadow:

Shape: ☐ Has shape

Shape:

Image generation: ☐ Generate image

Format:

☐ Generate image

☐ Image Processing

Fill and border

Fill: Type: Color:

Border: Type:

Shadow: Type:

Back image:

☒ Center ☐ Tile ☐ Stretch

Text display

☒ Custom ☐ Theme

Font face: Size: Offset: Weight: Alignment: Color:

☐ Relative ☐ Italic ☐ Blink ☐ Underline ☐ Superscript ☐ Strikethrough ☐ Small caps ☐ Oblique

Link display

Link color: Visited link color: Active link color:

OK Cancel

Control properties

FIG. 13

1411

Generate HTML

1417

Generate

Cancel

Output directory:

E:\applications\search20\

Generate only this document:

displayorderi

Type of data binding

☐ Optimized Static and dynamic as marked

☒ Dynamic only: Ignore markings

☐ Static only: Ignore markings

Object details

☒ Stored procedures

☐ SQL statements

☒ Compile stored procedures

Browsers

	Gen	Browser	Directory
1	<input checked="" type="checkbox"/>	Microsoft IE 5	
2	<input type="checkbox"/>	Microsoft IE 4	
3	<input type="checkbox"/>	Netscape 4	
4	<input type="checkbox"/>	Netscape 3	NS3\

Style sheets

☐ Generate style sheets

1415

1413

FIG. 14

19/20

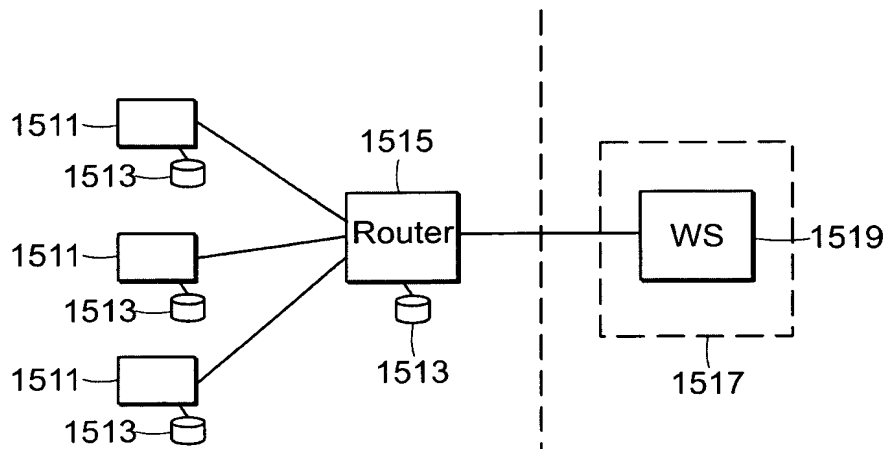


FIG. 15
PRIOR ART

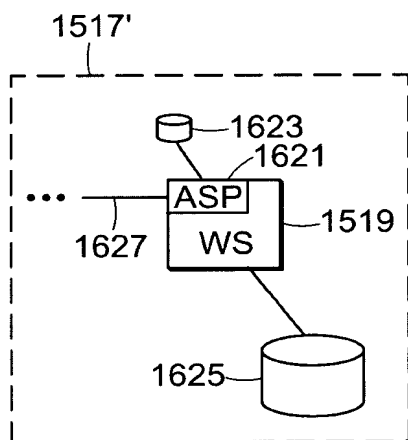


FIG. 16
PRIOR ART

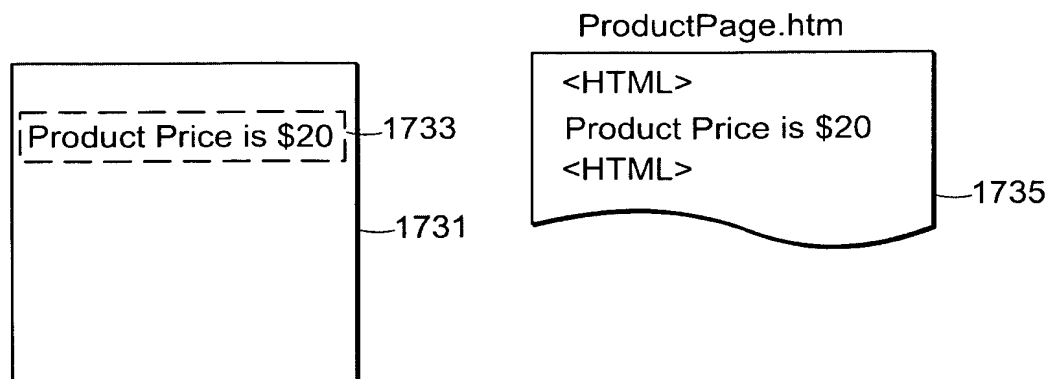


FIG. 17
PRIOR ART

20/20

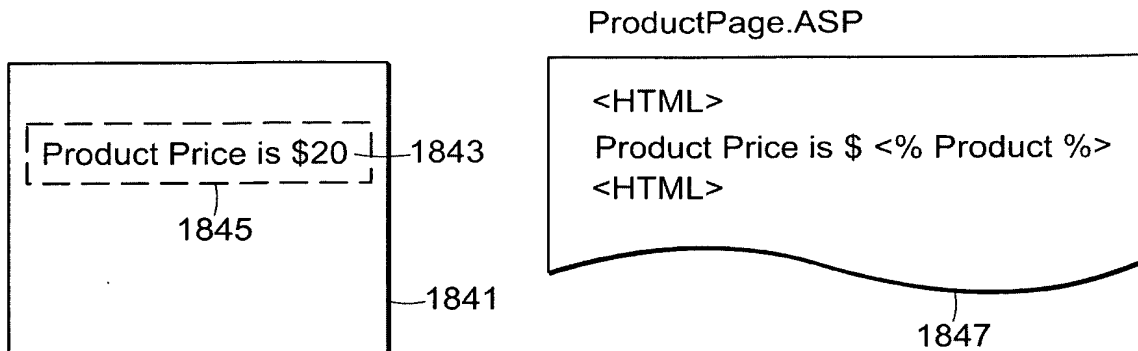


FIG. 18
PRIOR ART

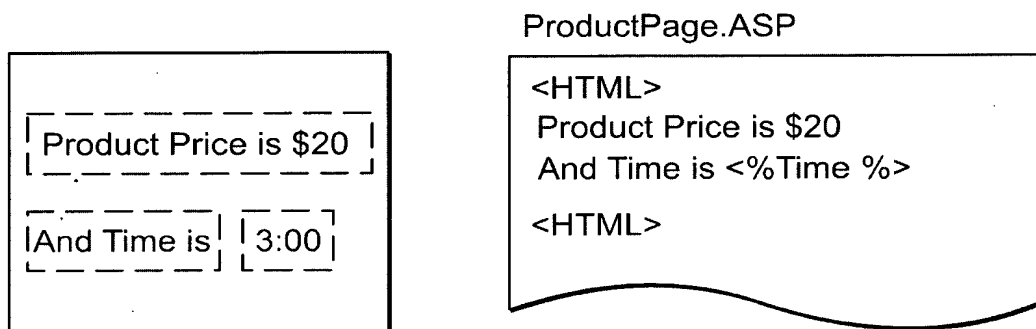


FIG. 19

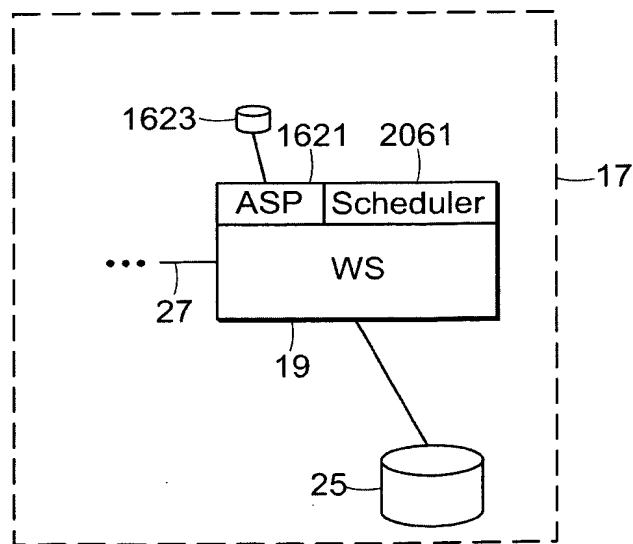


FIG. 20